Green, Michelle

From: Miller, Scott
Sent: Monday, May 16, 2016 11:01 AM
To: Saskowski, Ronald
Subject: FW: Smokey Mountain Smelters RI/FS Task Order Start Date
Attachments: TO #019.pdf

Hello Ron,
Please save this to SEMS for Smokey Mountain Smelters.
Thank you,
Scott

From: Miller, Matthew [mailto:mamiller@versar.com]
Sent: Monday, May 16, 2016 11:00 AM
To: Miller, Scott <Miller.Scott@epa.gov>
Subject: RE: Smokey Mountain Smelters RI/FS Task Order Start Date

Scott,

Here is the order form 348 in the event it is useful to have more than just the date.

Thanks,

Matt

From: Miller, Scott [mailto:Miller.Scott@epa.gov]
Sent: Monday, May 16, 2016 10:15 AM
To: Miller, Matthew <mamiller@versar.com>
Subject: RE: Smokey Mountain Smelters RI/FS Task Order Start Date

Hello Matt,
Yes, that is it.
Thank you,
Scott

From: Miller, Matthew [mailto:mamiller@versar.com]
Sent: Monday, May 16, 2016 10:15 AM
To: Miller, Scott <Miller.Scott@epa.gov>
Subject: RE: Smokey Mountain Smelters RI/FS Task Order Start Date

Scott,

Are you looking for the original TO19 approval date? The original contract order is dated 12/16/10.

If this is not what you are looking for, please email or call me and I we will sort out what you need.

Thanks,

Matt

Matt Miller, PG
Hydrogeologist
Environmental Services Group

VERSAR

Direct Line: 404-419-4083
Office: 404-443-2777
Cell: 404-615-3695
Email: mamiller@versar.com
Visit us at: www.versar.com

From: Miller, Scott [mailto:Miller.Scott@epa.gov]
Sent: Friday, May 13, 2016 7:38 PM
To: Miller, Matthew <mamiller@versar.com>
Subject: FW: Smokey Mountain Smelters RI/FS Task Order Start Date

Hello Matt,
Got an out of office response from Arnie. Can you help me with the RI/FS task order approval date for Smokey Mountain Smelters? Appreciate your hard work on the bench scale pilot plan there at Smokey Mountain Smelters.
Thank you,
Scott

From: Miller, Scott
Sent: Friday, May 13, 2016 7:35 PM
To: Ostrofsky, Arnold <Aostrofsky@versar.com>
Subject: Smokey Mountain Smelters RI/FS Task Order Start Date

Hello Arnie,
Hope that you are enjoying a well-deserved break this weekend. On Monday, could you let me know what the RI/FS task order approval date was for Smokey Mountain Smelters?
Also, had a chance to review the bench scale pilot plan for groundwater out there. It looks very promising. I'd like to schedule a conference call with you, Matt, Bill Osteen, and me within the next two weeks to finalize any feedback that we may have on it. May also go ahead and bring in TDEC.

Will be in touch with good dates for Bill.

Thank you,
Scott Miller, CHMM
Remedial Project Manager
Superfund Restoration & Sustainability Section
U.S. EPA Region 4

61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-9120
fax: (404) 562-8896

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 2 PAGES

IMPORTANT Mark all packages and papers with contract and/or order numbers

1 DATE OF ORDER	2 CONTRACT NO. (If any)	3 ORDER NO	4 REQUISITION/REFERENCE NO
12/16/2010	EP-S4-08-03	EP-G11 4-00019	PR-R4-11-00065

5 ISSUING OFFICE (Address correspondence to)
REGION 4
US ENVIRONMENTAL PROTECTION AGENCY
ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW
ATLANTA GA 30303-3104

6 SHIP TO
a NAME OF CONSIGNEE
REGION 4
b STREET ADDRESS
US ENVIRONMENTAL PROTECTION AGENCY
ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW
c CITY: ATLANTA | d STATE: GA | e ZIP CODE: 30303-3104

7 TO NA
a NAME OF CONTRACTOR
JM WALLER ASSOCIATES INC DBA JMWA
b COMPANY NAME
c STREET ADDRESS
11329 RANDOM HILLS RD STE 210
d CITY: FAIRFAX | e STATE: VA | f ZIP CODE: 22030

f SHIP VIA

8 TYPE OF ORDER
a PURCHASE — REFERENCE YOUR
Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated
[X] b DELIVERY
Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract

9 ACCOUNTING AND APPROPRIATION DATA	10 REQUISITIONING OFFICE
See Schedule	RECONSTRUCT ORIGINATING OFFICE

11 BUSINESS CLASSIFICATION (Check appropriate box(es))
[X] a SMALL | [ ] b OTHER THAN SMALL | [ ] c DISADVANTAGED | [X] g SERVICE-DISABLED VETERAN-OWNED
[ ] d WOMEN-OWNED | [ ] e HUBZone | [ ] f EMERGING SMALL BUSINESS

12 F O B POINT
Destination

13 PLACE OF		14 GOVERNMENT B/L NO	15 DELIVER TO F O B POINT ON OR BEFORE (Date)	16 DISCOUNT TERMS
a INSPECTION	b ACCEPTANCE			
Destination	Destination			

17. SCHEDULE (See reverse for Rejections)

ITEM NO (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 627009152 Smokey Mountain Smelters RI/FS (019-RICO-A4MD) TOPO: MCLARK12 Max Expire Date: 06/30/2012 Continued ...					

18 SHIPPING POINT	19 GROSS SHIPPING WEIGHT	20 INVOICE NO	17(h) TOTAL (Cont pages)

21 MAIL INVOICE TO

SEE BILLING INSTRUCTIONS ON REVERSE

a NAME: RTP FINANCE CENTER — $20,000.00

b. STREET ADDRESS (or P O Box): US ENVIRONMENTAL PROTECTION AGENCY
RTP-FINANCE CENTER
MAIL DROP D143-02
109 TW ALEXANDER DRIVE

c CITY: DURHAM | d STATE: NC | e ZIP CODE: 27711

17(i) GRAND TOTAL: $20,000.00

22 UNITED STATES OF AMERICA BY (Signature)

23 NAME (Typed)
Dan Owen
TITLE CONTRACTING/ORDERING OFFICER

IMPORTANT Mark all packages and papers with contract and/or order numbers

DATE OF ORDER	CONTRACT NO	ORDER NO
12/16/2010	EP-S4-08-03	EP-G14-00019

ITEM NO (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Admin Office: REGION 4 US ENVIRONMENTAL PROTECTION AGENCY ATLANTA FEDERAL CENTER 61 FORSYTH STREET SW ATLANTA GA 30303-3104 Accounting Info: 11-T-4AD0P-302DD2C-2505-A4MDC001-C001-114ADT 1006-001 BFY: 11 Fund: T Budget Org: 4AD0P Program (PRC): 302DD2C Budget (BOC): 2505 Job #: A4MDC001 Cost: C001 DCN - Line ID: 114ADT1006-001 Period of Performance: 12/16/2010 to 06/30/2012 Contract Ceiling and Funding for BASE Period					
0001	Contract Ceiling for BASE Period				20,000.00	
	The obligated amount of award: $20,000.00. The total for this award is shown in box 17(i).					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H)) $20,000.00

TASK ORDER PROVISIONS

Contract: EP-S4-08-03, Task Order Number: 0019

Background

This action initiates a new Remedial Investigation/Feasibility Study (RI/FS) task order for the Smokey Mountain Smelters site (010-RICO-A4MD) in accordance with the attached statement of work and the terms and conditions of Clause G.9., Ordering Methods, of the basic contract.

Task Order Funding Ceiling

An initial task order funding ceiling of $20,000.00 is hereby established for a site visit, scoping meeting, review of existing information and development of the RI/FS task order work plan under Task 1 (Project Planning). The contractor shall acknowledge receipt of this task order within five (5) calendar days and shall prepare and forward to the Contracting Officer within fifteen (15) business days, a written task order work plan proposal.

Task Order Incremental Funding

The amount of task order funding currently available for Task 1 (Project Planning) is 20,000.00. The contractor shall not make expenditures or incur obligations under this task order in excess of the ceiling price of $20,000.00, except at the contractor's own risk.

When the contractor has reason to believe that the costs for this task order, which will accrue in the next thirty (30) days, will bring the total cost of this task order over seventy five (75) percent of the available funding specified in the task order, the contractor shall notify the Contracting Officer. Additional funding as needed shall be provided incrementally through a task order modification to fund the contractor's task order proposal.

EPA Contacts:

Contract Level COR
Meredith Clark
(404) 562-8919

Task Order COR
Rusty Kestle
(404) 562-8819

Contract Specialist
Mark Benson
(404) 562-8324

Contracting Officer
Michael E. Allen
(404) 562-8393

STATEMENT OF WORK FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)

Smokey Mountain Smelters, Knox County, Tennessee

8 December 2010

TABLE OF CONTENTS

STATEMENT OF WORK FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)

Smokey Mountain Smelters, Knox County, Tennessee

December 2010

Contract No: EP-S4-08-03
Task Order No:0019

Introduction

PURPOSE

The purpose of this task order is to conduct a remedial investigation/feasibility study (RI/FS) at the Smokey Mountain Smelters Superfund site to select a remedy that eliminates, reduces, or controls risks to human health and the environment. Specifically, the RI/FS involves the investigation and study of the impact on soils, air, groundwater, sediments, ecosystems and surface water by waste materials disposed of at the site. This statement of work (SOW) sets forth the framework and requirements for this effort. The goal is to develop the minimum amount of data necessary to support the selection of an approach for site remediation and then to use this data to result in a well-supported Record of Decision (ROD). The estimated completion date for this task order is June 30, 2012.

SITE DESCRIPTION

The total Smokey Mountain Smelters Site is approximately 13 acres in size and is located at 1508 Maryville Pike, Knoxville, TN, approximately four miles south of downtown Knoxville. The site included one large industrial process building, several smaller outbuildings, a small lagoon, a large outside saltcake waste pile, and three mid-sized indoor dross waste piles. The process building was approximately 100 feet wide by 300 feet long, and 50 feet high; it housed some equipment and three piles of aluminum dross that were each approximately 1,000 cubic yards in size. All of the buildings at the site have recently been demolished and all of the demolition debris from these buildings has been taken off-site for disposal/recycling. Most of the secondary aluminum smelting waste (saltcake and dross) and some other non-recyclable waste (mostly scrap tires) still remain on site.

The spring-fed lagoon on site measures approximately 25 feet wide by 100 feet long and is located to the southeast of the process building. The saltcake waste pile is approximately 50,500 cubic yards in size and covers an area of about 4 acres on the south side of the process building. Surface runoff from the Site generally flows to the southwest. Leachate and surface runoff discharges to an unnamed tributary stream, reaching Flenniken Branch and eventually the Tennessee River.

The Smokey Mountain Smelters Site was originally a series of fertilizer and agricultural chemical companies which operated from the 1920s to the 1960s. Smokey Mountain Smelters (SMS), also known as Rotary Furnace, Inc., operated at the Site from 1979 to 1994 and has been inactive since that time. The aluminum smelting operations at the site were discontinued and the property was abandoned in 1994 after the death of the then-current owner/operator. The facility was a secondary aluminum smelting operation. The process involved the melting of scrap aluminum and aluminum dross (a waste by-product of primary and secondary aluminum smelting) and casting the molten aluminum ingots. Raw materials at the facility primarily consisted of scrap aluminum and aluminum dross. Waste material from the SMS operation was primarily saltcake, a residue from dross smelting with high salt and low metal content. Other waste materials included baghouse dust and discarded aluminum dross. Much of the Site is covered in a waste pile consisting of saltcake and aluminum dross that was dumped directly on the land surface without a liner or drainage controls.

In 1983, Tennessee DHE Division of Solid Waste Management issued a notice to SMS with the conclusion that the Site was "unsuitable for use as an industrial landfill;" however, landfilling on-site continued to occur for several years afterward. In addition, the Knox County Department for Air Pollution Control (KCDAPC) documented numerous citizen complaints regarding excessive air emissions from the Site and cited SMS for several air quality violations in the 1980s. A residential apartment community within 75 feet of the Site houses approximately 560 residents. During a 2008 Site visit the EPA OSC observed that access controls were not adequate to keep trespassers out of the property. Holes had been cut in the site fence and a path leads from the Site to the nearby apartment complex. A time critical removal action was initiated to provide stronger security measures in order to keep trespassers away from the water-reactive dross material, and collect additional data to determine if further waste removal or treatment action is necessary.

Multiple sampling events between 1997 and 2006 have been conducted at the Site to characterize the composition and contaminant concentrations in the waste piles, the raw material piles, the on-site lagoon, leachate to the unnamed tributary, and downstream impacts to the unnamed tributary and Flenniken Branch. Dross and saltcake are exothermically water-reactive materials that release heat and ammonia gas, and leach aluminum, ammonia, chlorides, and other contaminants.

GENERAL REQUIREMENTS

This is a performance-based, completion-form task order that requires the contractor to provide an end product for a negotiated cost and fee. The end product of this task order is a well-supported ROD that when implemented through a remedial action will eliminate, reduce or control risks to human health and the environment. Furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the RI/FS in accordance with the requirements of this SOW.

This SOW and accompanying work breakdown structure (WBS) (Attachment 2) is provided as a format for the contractor to structure its proposed approach and cost estimate. The contractor should select and develop the appropriate components found in the SOW and WBS to successfully meet the requirements of this task order. Use the WBS in cost estimate preparation and technical and cost tracking and reporting under this task order.

In conducting the task order, EPA expects the contractor to propose and implement the most appropriate and cost-effective procedures and methodologies using accepted engineering practices and controls. Throughout the performance of this task order, EPA expects the contractor to be responsible for performing services and providing products at the lowest reasonable cost. If the contractor fails to meet the requirements within the negotiated costs, the government may elect to provide the contractor with additional funds to complete the task order without providing any additional fee. If there are changes to the SOW by the government, the government will issue a formal amendment to the SOW and negotiate the cost of the amendment with the contractor to form a new cost estimate.

A summary of the potential major deliverables and proposed schedule for submittals is in Attachment 1. This summary and schedule can be used as the basis for the contractor' s proposed deliverables and schedules included in the work plan. Submit the major deliverables using the Transmittal of Documents for Acceptance by EPA Form. (Attachment 4). The EPA Task Order Manager (TOM)/Contracting Officer Representative (COR) will track deliverables submitted by the contractor using the Transmittal Register (Attachment 5).
A list of primary guidance and reference material is provided in Attachment 3. In all cases, the contractor shall use the most recently issued guidance.

Communicate at least weekly with the EPA TOM/COR, either in face-to-face meetings or through conference calls. Document all decisions that are made in meetings and conversations with EPA. Forward this documentation to the TOM/COR within five working days of the meeting or conversation.

EPA provides oversight of contractor activities throughout the RI/FS. EPA review and approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the environment. EPA also reviews deliverables to assess the likelihood that the RI/FS achieves its goals and that its performance and operations requirements have been met. Acceptance of

deliverables by EPA does not relieve the RI/FS contractor from responsibility for the adequacy of the deliverables or its professional responsibilities.

RECORD KEEPING REQUIREMENTS

Maintain all technical and financial records for the RI/FS in accordance with the contract. At the completion of the task order, submit an official record of the RI/FS in both compact disk and a hardcopy to the TOM/COR. Provide the deliverables using electronic media.

USEPA PRIMARY CONTACTS

The primary contact for this task order is Rusty Kestle. He can be reached at (404) 562-8819, via facsimile at (404) 562-8896, or via e-mail at kestle.rusty@epa.gov. His mailing address is US EPA Region 4, 61 Forsyth Street. S.W., Atlanta, GA 30303-8909. The secondary contact is Meredith Clark. She can be reached at (404) 562-, via facsimile (404) 562-8896, or via e-mail at clark.meredith@epa.gov. Her mailing address is US EPA Region 4, 61 Forsyth Street S.W. Atlanta GA 30303-8909.

TASK ORDER COMPLETION DATE AND PROJECT CLOSEOUT

At the completion of the task order, perform all necessary project closeout activities as specified in the contract. These activities include closing out any subcontracts, indexing and consolidating project records and files as required above, and providing a technical and financial closeout report to EPA. The goal is to complete all technical activities and closeout activities for this task order by Jun 30, 2011.

The remainder of this SOW describes the work elements associated with the RI/FS.

RI/FS Work Planning

This work element involves planning for the execution and overall management of this task order. The technical and managerial activities required to implement the RI/FS and the associated costs shall be developed during the planning phase and detailed in the RI/FS work plan and cost estimate.

WORK PLAN WBS: 1.1

Prepare and submit a RI/FS work plan that includes a detailed description of implementation activities, performance monitoring, and overall management strategy, including optimization, for the RI/FS. Typical activities involved in preparing the work plan include, but are not limited to, the following:

1. Contacting the Task Order Manager (TOM)/Contracting Officer Representative (COR) within five calendar days after receipt of the task order to schedule the scoping meeting to be held at the U.S. EPA Region 4 office in Atlanta, GA. Regional personnel will be available to meet with the contractor 20 to 30 calendar days after the initial scoping meeting to discuss and clarify any issues the contractor may have regarding this project. Contact the TOM/COR to schedule this meeting at least five working days before the proposed meeting date.

2. Conducting a site visit with the TOM/COR during the RI/FS planning phase to assist in developing an understanding of the site and any logistics.

3. Preparing and submitting a final RI/FS work plan within 15 calendar days after the scoping meeting. The work plan shall include a detailed description of the technical approach for the RI/FS activities in accordance with the Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Interim Final, U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive NO. 9355.3 01. Specify the necessary procedures, inspections, deliverables, and schedules.

Include a comprehensive implementation management schedule for completion of each major activity and submittal.

4. Preparing the estimated cost to complete the task order, including subcontractor costs, for each element of the SOW; providing a breakdown of the cost by task and subtask levels, in accordance with the contract work breakdown structure (WBS).

5. Negotiating and preparing a revised work plan, if the contractor fails to meet the Region=s minimum standards. Note that EPA does not anticipate a need to re-negotiate with the contractor nor to require the contractor to revise the work plan. Contractor costs associated with the preparation of the revised work plan and cost estimate shall be paid by the government but shall not bear fee.

6. Providing conflict of interest disclosure.

SITE-SPECIFIC PLANS WBS: 1.2

Review all existing site-specific plans and prepare, update, and/or maintain plans, as necessary, for RI/FS implementation. Incorporate the plans and procedures received from any subcontractor(s) into the overall site plans. Should the contractor fail to meet the required standards in accordance with the appropriate legal, regulatory, and EPA guidance, prepare revised site-specific plans. (NOTE: In that event, contractor costs associated with the preparation of the revised site-specific plans shall be paid by EPA but shall not bear fee.) Typical plans include, but are not limited to, the following:

1. Sampling and Analysis Plan (SAP) in accordance with 40 CFR 300.415(b)(4)(ii).

2. Site-specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 29 CFR 1910.120(l)(1) and (l)(2).

Project Management and Reporting

PROJECT MANAGEMENT WBS: 1.4

Perform activities required to effectively manage the task order. These activities typically include, but are not limited to, the following:

1. Monitoring costs and progress.

2. Preparing and submitting monthly progress reports that document monthly and cumulative cost, performance status, and technical progress.

3. Preparing and submitting monthly invoices in accordance with the level of detail as specified in the contract.

4. Manage, track, and report status of site-specific equipment.

5. Participating in meetings and preparing and submitting meeting summaries.

6. Accommodating any external audit or review mechanism that EPA requires.

7. Evaluating existing data, including usability, when directed by EPA.

8. Coordinating with local and emergency response teams.

9. Reviewing background documents as directed by EPA.

10. Attending EPA-held training.

PROJECT INITIATION WBS: 1.5

Perform project initiation and support that will lead to the selection of a remedy that eliminates, reduces, or controls risks to human health and the environment. Typical activities include, but are not limited to, the following:

1. Developing a conceptual understanding of the site based on the evaluation of existing data and summarizing this understanding in a Technical Memorandum.

2. Identifying likely response scenarios and potentially applicable technologies and operable units that address site problems and submitting this information in a Technical Memorandum.

3. Preparing conceptual exposure pathway analysis in accordance with Regional guidelines and OSWER Directives 9285.7-02B, 12/89 (*Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A, Baseline Risk Assessment)*; Interim Final) and 9285.7-01A (*Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation Manual*).

4. Initiating identification of Applicable or Relevant and Appropriate Requirements (ARARs) that affect remedy selection.

5. Developing an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.

6. Developing/reviewing qualifications of the laboratory for the given analytical requirements.

7. Procuring, managing, and providing oversight of pool and team subcontracts for analytical services.

COMMUNITY INVOLVEMENT (CR) WBS: 2

Prepare and implement the Community Involvement Plan (CIP) for the site. Perform community involvement activities in support of EPA throughout the RI/FS in accordance with the *National Oil and Hazardous Substances Pollution Contingency Plan* (NCP, 40 CFR Part 300) and the *Community Relations in Superfund - A Handbook*, (U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0-3C, January 1992). These tasks include, but are not limited to, the following:

1. Conducting community interviews.

2. Developing Community Involvement Plan (CIP).

3. Providing public meeting and/or open house support.

4. Preparing fact sheets, notices and other informational documents.

5. Providing support for proposed plan.

6. Providing public hearing support.

7. Publishing public notices in local newspapers serving the site community.

8. Maintaining public information repository.

9. Developing and updating site mailing lists.

10. Providing administrative and technical support for Responsiveness Summary.

11. Preparing presentation materials.

12. Implementing other community involvement activities as identified by the site-specific CIP or EPA.

13. Providing technical support to review Community Involvement deliverables and participate in public meetings.

Risk Identification and Assessment

FIELD INVESTIGATION/DATA ACQUISITION (FI) WBS: 3

Collect environmental data required to support the remedial investigation/feasibility study. Data acquisition begins with EPA's approval of the Field Sampling Plan (FSP). Typical activities include, but are not limited to, the following:

1. Mobilization/demobilization.

2. Hydrogeological assessment.
   - Test boring and monitoring well installation and development
   - Downhole geophysics
   - Groundwater elevation measurements
   - Surface water elevation measurements

3. Soil boring, drilling, and testing.

4. Environmental sampling.
   - Field screening
   - Groundwater sampling
   - Surface soil sampling
   - Soil boring/permeability sampling
   - Surface water and sediment sampling
   - Air monitoring
   - Indoor sampling

5. Reuse assessment.

6. Geotechnical survey.

7. Field-generated waste characterization and disposal in accordance with local, State and Federal regulations.

8. Site reconnaissance.
   - Ecological resources reconnaissance
   - Well inventory
   - Existing well development and establishment of sampling points
   - Landfill gas emission sampling
   - Surface geophysical survey
   - On-site and residential well sampling
   - Surface water sampling
   - Soil sampling

- Sediment sampling
- Leachate sampling
- Field screening
- Tank and drum sampling

9. Ecological Characterization.
    - Wetland and habitat delineation/function and value assessment
    - Wildlife observations
    - Benthic reconnaissance/community characterization
    - Identification of endangered species and others of special concern
    - Bioassays
    - Bioaccumulation studies
    - Biota sampling/population studies

SAMPLE ANALYSIS (SN) WBS: 4

Analyze split samples taken to document and confirm PRP sampling results and performance. A variety of mechanisms may be used to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or regionally procured laboratories.

ANALYTICAL SUPPORT AND DATA VALIDATION (AN) WBS: 5

Schedule, coordinate, track, and oversee sample analyses and validate analytical data. Typical activities include, but are not limited to, the following:

1. Collecting, preparing, and shipping environmental samples in accordance with the Field Sampling Plan (FSP). The following types of sampling shall be required:
    a. Field screening
    b. Ground water sampling
    c. Surface and subsurface soil sampling
    d. Surface water and sediment sampling
    e. Air monitoring and sampling
    f. Biota sampling
    g. Other types of media sampling and screening

2. Developing data quality objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.

3. Requesting, obtaining, and performing oversight of analytical services in compliance with EPA requirements.

4. Coordinating with the EPA Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical support, data validation, and quality assurance issues.

5. Implementing the EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.

6. Providing sample management including chain of custody procedures, information management, sample retention, and 10-year data storage.

7. Performing data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. Performing data validation in accordance with Regional guidelines.

8. Reviewing data for usability for its intended purpose.

9. Providing reports on data validation and usability.

DATA EVALUATION (DE) WBS: 6

Compile analytical and field data. Provide data in format that is compatible with Regional or National electronic data management network. Data shall be used in the preparation of the RI and Risk Assessment Report tables, maps and figures. Typical activities include, but are not limited to, the following:

1. Data usability evaluation and field quality assurance/quality control (QA/QC).

2. Data Reduction and Tabulation.

3. Data trend evaluation and/or modeling and submission of Technical Memorandum.

4. Data reduction and tabulation.
    a. Soil boring and monitoring well logs.
    b. Field sampling data.
    c. Hydrogeological testing data.
    d. Geophysical data (downhole geophysics, survey).
    e. Analytical results.

5. Environmental Fate and Transport Modeling/Evaluation.

RISK ASSESSMENT (RA) WBS: 7

Conduct baseline human health and ecological risk assessments. The objective of these assessments is to characterize and quantify, where appropriate, the current and potential human health and environmental risks that would prevail if no further remedial action is taken.

Risk Assessment must be done in accordance with applicable Agency guidance, directives and procedures.

RI/FS Reports

TREATABILITY STUDY/PILOT TESTING (TT) WBS: 8

Conduct laboratory screening, bench-scale and pilot-scale treatability studies to determine the suitability of remedial technologies or alternatives to site conditions and problems. Typical activities include, but are not limited to, the following:

1. Providing test facility and equipment.

2. Testing and operating equipment.

3. Retrieving sample for testing.

4. Preparing Technical Memorandum.

5. Characterizing and disposing of residuals in accordance with local, State, and Federal regulations.

REMEDIAL INVESTIGATION REPORT (RR) WBS: 9

Prepare findings after data have been evaluated. The RI shall provide information to assess risks to human health and the environment and to support the development, evaluation, and selection of appropriate response alternatives. The task includes all draft and final reports. The RI report shall be written in accordance with *Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA*, OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and *Guidance for Data Usability in Risk Assessment*, (EPA/540/G-90/008), October 1990 (or latest revision).

Typical components of the RI report include, but are not limited to, the following:

1. Site Background.

2. Investigation.
3. Field Investigation and technical approach
4. Chemical analyses and analytical methods
5. Field methodologies (biological, surface water, sediment, soil boring, soil sampling, monitoring well installation, groundwater sampling, hydrogeological assessment)

6. Site Characteristics.
7. Geology
8. Hydrogeology
9. Meteorology
10. Demographics and land use
11. Reuse assessment
12. Ecological assessment

13. Nature and Extent of Contamination.
14. Contaminant sources
15. Contaminant distribution and trends

16. Fate and Transport.
17. Contaminant characteristics
18. Transport processes
19. Contaminant migration trends

20. Risk assessment.

21. Summary and Conclusions.

REMEDIAL ALTERNATIVES SCREENING (RS) WBS: 10

Develop appropriate remedial alternatives to undergo full evaluation. The alternatives are to encompass a range including innovative treatment technologies consistent with the regulations outlined in the NCP, 40 CFR Part 300 and applicable Agency guidance, procedures and directives. The analysis will include institutional controls (ICs) to the extent appropriate. Typical activities include, but are not limited to, the following:

1. Establish remedial action objectives

2. Establish general response actions

3. Identify and screen applicable remedial technologies

4. Develop remedial alternatives in accordance with Section 300.430(e) of the NCP (1990)

5. Screen remedial alternatives for effectiveness, implementability and cost

6. Prepare Technical Memorandum.

REMEDIAL ALTERNATIVES EVALUATION (RE) WBS: 11

Assess individual alternatives against each of the nine evaluation criteria and a comparative analysis of all options against the evaluation criteria. The analysis shall be consistent with the NCP, 40 CFR Part 300 and shall consider the *Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA* (OSWER Directive 9355.3-01), *Guide to Developing and Documenting Cost Estimates During the Feasibility Study* (OSWER Directive 9355.0-75), and other pertinent OSWER guidance. The analysis will include institutional controls (ICs) to the extent appropriate. EPA will make the determination regarding final selection of the remedial alternative.

The nine criteria to be employed in evaluation of remedial alternatives are:

1. Overall protection of human health and the environment
2. Compliance with applicable or relevant and appropriate requirements (ARARs)
3. Long-term effectiveness and permanence
4. Reduction in toxicity, mobility or volume through treatment
5. Short-term effectiveness
6. Implementability - technical and administrative
7. Cost
8. State acceptance
9. Community acceptance.

FEASIBILITY STUDY REPORT (FS) WBS: 12

Prepare findings after remedial alternatives have been screened and evaluated. The task includes preparation of all draft and final reports. Typical components of the Feasibility Study report include, but are not limited to, a discussion of the following:

1. Feasibility Study Objectives.

2. Remedial Objectives.

3. General Response Actions.

4. Identification and Screening of Remedial Technologies.

5. Remedial Alternatives Description.

6. Detailed Analysis of Remedial Alternatives (individual and comparative).

7. Summary and Conclusions.

POST RI/FS SUPPORT (PR) WBS: 13

Provide support required for preparation of the ROD for the site. The final recommendation contained in the ROD shall represent the opinion and recommendation of EPA not that of the contractor. Typical activities include, but are not limited to, the following:

1. Attending public meetings, briefings, public hearings, technical meetings with PRPs.

2. Preparing presentation materials.

3. Providing technical assistance in the preparation of the Responsiveness Summary.

4. Providing technical assistance in the preparation of the Proposed Plan and ROD.

5. Preparing Feasibility Study Addendum.

ADMINISTRATIVE RECORD (AR) WBS: 14

Produce the Administrative Record. Typical activities include, but are not limited to, the following:

1. Attending meetings with EPA TOM/COR, Site Attorney, and Administrative Record Coordinator.

2. Providing assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.

3. Preparing Draft Administrative Record Index in accordance with EPA Regional guidance or other procedures as specified.

4. Preparing Administrative Record Index.

5. Coordinating duplication of Administrative Record.

6. Assembling Administrative Record and Index.

TASK ORDER CLOSEOUT (CO) WBS: 15

Perform the necessary activities to close out the task order in accordance with contract requirements. Typical activities include, but are not limited to, the following:

1. Packaging and returning documents to the government.

2. Duplicating/distribution/storage of files.

3. Archiving files in accordance with Federal Record Center requirements.

4. Preparing microfiche/microfilm/optical disk or other EPA-approved data storage technology.

5. Preparing the closeout report in accordance with Regional guidance or other procedures as specified in the task order.

Attachment 1 - Summary of Major Submittals for the RI/FS at Smokey Mountain Smelters

DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)	EPA REVIEW PERIOD
RI/FS Work Plan	3	15 business days after initiation of task order (TO)	21 days after receipt of work plan
Monthly Progress Reports	3	Monthly and as required in the contract	NA
Site Management Plan (SMP)	3	14 days after approval of RI/FS work plan	14 days after receipt of plan
Health and Safety Plan (HASP)	3	14 days after approval of RI/FS work plan	14 days after receipt of plan
Sampling and Analysis Plan (SAP)	3	14 days after approval of RI/FS work plan	14 days after receipt of plan
Quality Assurance Project Plan (QAPP)	3	14 days after approval of RI/FS work plan	14 days after receipt of plan
Field Sampling Plan (FSP)	3	14 days after approval of RI/FS work plan	14 days after receipt of plan
Fact Sheets	3	As needed	[number] days after receipt of fact sheet
Public Meeting Support Materials	TBD	One week prior to scheduled meeting	NA
Field Reports	3	3 days after every (time period, i.e., week) of field activities	7 days after receipt
Data Validation Report	3	14 days after receipt of all analytical results from laboratory	14 days after receipt
Data Evaluation Summary Report	3	14 days after receipt of all analytical results from laboratory	14 days after receipt
Human Health Risk Assessment Report	3	30 days after completion of field investigations	30 days after receipt
Ecological Risk Assessment Report	3	30 days after completion of field investigations	30 days after receipt
Treatability Study Work Plan	3	45 days after RI/FS work plan approval	21 days after receipt
Treatability Study Evaluation Report	3	30 days after completion of Treatability Study	21 days after receipt
Remedial Investigation Report	3	270 days after RI/FS work plan approval	21 days after receipt
Remedial Alternative Technical Memorandum	3	314 days after RI/FS work plan approval	21 days after receipt

DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)	EPA REVIEW PERIOD
Remedial Alternatives Evaluation	3	14 days after completion of Remedial Alternative Technical Memorandum	21 days after receipt
Feasibility Study Report	3	90 days after completion of RI	21 days after receipt
Closeout Report	3	30 days after final EE/CA Report submitted	21 days after receipt of report
Final Costs	3	90 days after TO closeout	NA

Attachment 2 - Work Breakdown Structure (WBS) for Remedial Investigation/Feasibility Study (RI/FS)

Introduction

The purpose of this work breakdown structure (WBS) is to set forth a framework for the contractor to develop their work plan and cost estimate for implementing a remedial investigation/feasibility study (RI/FS). The RI/FS is the evaluation and analysis phase of site remediation resulting in the selection of an alternative that eliminates, reduces, or controls risk to human health and the environment. This WBS is not intended to instruct the contractor as how to complete the RI/FS; rather, the WBS is intended to provide a common framework for the contractor and EPA for work plan and cost estimate development and to track cost throughout the RI/FS implementation.

Task 1 Project Planning and Support (PP)

1.1 Project planning.
- 1.1.1 Attend scoping meeting.
- 1.1.2 Conduct site visit.
- 1.1.3 Develop Work Plan and cost estimate
- 1.1.4 Negotiate Work Plan and Cost Estimate.
- 1.1.5 Provide conflict of interest disclosure.
- 1.1.6 Prepare Health and Safety Plan (HASP) (Prime Contractor).

1.2 Prepare, review, and revise the site-specific plans required to implement the RI/FS at the site.
- 1.2.1 Sampling and Analysis Plan (SAP).
- 1.2.2 Prepare a site-specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 29 CFR 1910.120(l)(1) and (l)(2).

1.3 Submit costs to the Contracting Officer for approval for task order-specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the task order and there is no contract-wide Pollution Liability Insurance.

1.4 Project management.
- 1.4.1 Monitor costs and prepare periodic status reports.
- 1.4.2 Participate in meetings/communicate routinely/prepare meeting notes.
- 1.4.3 Manage, track, and report status of site-specific equipment.
- 1.4.4 Accommodate any external audit or review mechanism that EPA shall require.
- 1.4.5 Evaluate existing data, including usability, when directed by EPA.
- 1.4.6 Coordinate with local and emergency response teams.
- 1.4.7 Review background documents as directed by EPA.
- 1.4.8 Attend EPA-held training.

1.5 Project initiation and support.
- 1.5.1 Develop a conceptual understanding of the site based on existing data.
- 1.5.2 Identify likely response scenarios, potentially applicable technologies and operable units that address site problems.
- 1.5.3 Prepare conceptual exposure pathway analysis.
- 1.5.4 Initiate identification of Applicable or Relevant and Appropriate Requirements (ARARs) that affect remedy selection.
- 1.5.5 Develop an EPA-approved laboratory quality assurance program.
- 1.5.6 Develop/review qualifications of the laboratory for the given analytical requirements.
- 1.5.7 Procure, manage, and provide oversight of subcontracts for analytical services.

Task 2 Community Involvement (CR)

2.1 Conduct community interviews.

2.2 Prepare Community Involvement Plan (CIP).

2.3 Provide public meeting and/or open house support.

2.4 Prepare fact sheets, notices and other informational documents.

2.5 Provide support for proposed plan.

2.6 Provide public hearing support.
2.7 Publish public notices in local newspapers serving the site community.
2.8 Maintain public information repositories.
2.9 Develop and update site mailing list.
2.10 Provide administrative and technical support for Responsiveness Summary.
2.11 Prepare presentation materials.
2.12 Implementation of other Community Involvement activities as identified by the site-specific Community Involvement Plan or EPA.
2.13 Provide technical support to review Community Involvement deliverables and participate in public meetings.

Task 3 Field Investigation/Data Acquisition (FI)

3.1 Mobilization/demobilization.
3.2 Hydrogeological assessment.
3.3 Soil boring, drilling, and testing.
3.4 Environmental sampling.
3.5 Reuse assessment.
3.6 Geotechnical survey.
3.7 Field-generated waste characterization and disposal in accordance with local, state and federal regulations.
3.8 Site reconnaissance.
3.9 Ecological characterization.

Task 4 Sample Analysis (SN)

4.1 Sample analyses and production of analytical data

Task 5 Analytical Support and Data Validation (AN)

5.1 Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP).
- 5.1.1 Field screening.
- 5.1.2 Ground water sampling.
- 5.1.3 Surface and subsurface soil sampling.
- 5.1.4 Surface water and sediment sampling.
- 5.1.5 Air monitoring and sampling.
- 5.1.6 Biota sampling.
- 5.1.7 Other types of media sampling and screening.

5.2 Develop performance or acceptance criteria (such as data quality objectives (DQO)) for each sampling event; these criteria shall be the determinative factor for assessing the success or failure of the sampling.
5.3 Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
5.4 Coordinate with the EPA Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical support, data validation, and quality assurance issues.
5.5 Implement the EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
5.6 Provide sample management including chain of custody procedures, information management, sample retention, and 10-year data storage.
5.7 Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. Perform data validation in accordance with Regional guidelines.
5.8 Review data for usability for its intended purpose.
5.9 Provide reports on data validation and usability.

Task 6 Data Evaluation (DE)

6.1 Combine analytical and field data, providing data in a format that is compatible with Regional or national electronic data management network.
- 6.1.1 Data usability evaluation and field quality assurance/quality control (QA/QC).
- 6.1.2 Data reduction and tabulation.
- 6.1.3 Data trend evaluation and/or modeling and submission of Technical Memorandum.

6.2 Data reduction, tabulation, and evaluation.

6.4 Environmental fate and transport modeling/evaluation.

Task 7 Risk Assessment **(RA)**

7.1 Conduct a baseline human health risk assessment.
7.2 Conduct a baseline ecological risk assessment.
7.3 Prepare draft risk assessment reports.
7.4 Prepare final risk assessment reports.

Task 8 Treatability Study/Pilot Testing **(TT)**

8.1 Provide test facility and equipment.
8.2 Test and operate equipment.
8.3 Retrieve sample for testing.
8.4 Prepare Technical Memorandum.
8.5 Characterize and dispose of residuals in accordance with Local, State and Federal Regulations.

Task 9 Remedial Investigation Report **(RR)**

9.1 Prepare draft Remedial Investigation report(s).
9.2 Prepare final Remedial Investigation report.

Task 10 Remedial Alternatives Screening **(RS)**

10.1 Establish remedial action objectives.
10.2 Establish general response actions.
10.3 Identify and screen applicable remedial technologies.
10.4 Develop remedial alternatives in accordance with Section 300.430(e) of the NCP (1990).
10.5 Screen remedial alternatives for effectiveness, implementability and cost.
10.6 Prepare Technical Memorandum.

Task 11 Remedial Alternatives Evaluation **(RE)**

11.1 Assess individual alternatives against each of the evaluation criteria.
11.2 Perform a comparative analysis of all options against the evaluation criteria.
11.3 Prepare a report of findings.

Task 12 Feasibility Study Report **(FS)**

12.1 Prepare draft Feasibility Study report(s).
12.2 Prepare final Feasibility Study report.

Task 13 Post RI/FS Support **(PR)**

13.1 Attend public meetings, briefings, public hearings, technical meetings with PRPs.
13.2 Prepare presentation materials.
13.3 Provide technical assistance in the preparation of the Responsiveness Summary.
13.4 Provide technical assistance in the preparation of the Proposed Plan and ROD.
13.5 Prepare Feasibility Study Addendum.

Task 14 Administrative Record **(AR)**

14.1 Attend meeting with EPA TOM/COR, Site Attorney, and Administrative Record Coordinator.
14.2 Provide assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.
14.3 Prepare Draft Administrative Record Index in accordance with EPA regional guidance or other procedures as specified.
14.4 Prepare Administrative Record Index.
14.5 Coordinate duplication of Administrative Record.
14.6 Assemble Administrative Record and Index.

Task 15 Task Order Closeout **(CO)**

15.1 Package and return documents to the government.

15.2 Duplicate, distribute, and store files.
15.3 Archive files in accordance with Federal Record Center requirements.
15.4 Produce microfiche/microfilm/optical disk or other EPA-approved storage format.
15.5 Prepare the Task Order Closeout Report (TOCR).

Attachment 3 - Regulations and Guidance Documents

The following list, although not comprehensive, consists of many of the regulations and guidance documents that apply to the RI/FS process:

1. American National Standards Practices for Respiratory Protection. American National Standards Institute Z88.2-1980, March 11, 1981.
2. ARCS Construction Contract Modification Procedures, September 1989, OERR Directive 9355.5-01/FS.
3. CERCLA Compliance with Other Laws Manual, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (DRAFT), OSWER Directive No. 9234.1-01 and -02.
4. Community Relations in Superfund - A Handbook, U.S. EPA, Office of Emergency and Remedial Response, January 1992, OSWER Directive No. 9230.0-3C.
5. A Compendium of Superfund Field Operations Methods, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
6. Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, U.S. EPA, Office of Solid Waste and Emergency Response, October 1986, OSWER Directive No. 9472.003.
7. Contractor Requirements for the Control and Security of RCRA Confidential Business Information, March 1984.
8. Data Quality Objectives for Remedial Response Activities, U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
9. Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual, U.S. EPA Region IV, Environmental Services Division, April 1, 1986 (revised periodically).
10. EPA NEIC Policies and Procedures Manual, EPA-330/9-78-001-R, May 1978, revised November 1984.
11. Federal Acquisition Regulation, Washington, DC: U.S. Government Printing Office (revised periodically).
12. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive NO. 9355.3-01.
13. Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potential Responsible Parties, U.S. EPA Office of Emergency and Remedial Response, EPA/540/G-90/001, April 1990.
14. Guidance on Expediting Remedial Design and Remedial Actions, EPA/540/G-90/006, August 1990.
15. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites, U.S. EPA Office of Emergency and Remedial Response (DRAFT), OSWER Directive No. 9283.1-2.
16. Guide for Conducting Treatability Studies Under CERCLA, U.S. EPA, Office of Emergency and Remedial Response, Prepublication version.
17. Guide to Management of Investigation-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-03FS, January 1992.
18. Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.
19. Health and Safety Requirements of Employees Employed in Field Activities, U.S. EPA, Office of Emergency and Remedial Response, July 12, 1982, EPA Order No. 1440.2.
20. Interim Guidance on Compliance with Applicable of Relevant and Appropriate Requirements, U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
21. Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.
22. Methods for Evaluating the Attainment of Cleanup Standards: Vol. 1, Soils and Solid Media, February 1989, EPA 23/02-89-042; vol. 2, Ground Water (Jul 1992).
23. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, Federal Register 40 CFR Part 300, March 8, 1990.
24. NIOSH Manual of Analytical Methods, 2nd edition. Volumes I-VII for the 3rd edition, Volumes I and II, National Institute of Occupational Safety and Health.
25. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, National Institute of Occupational Safety and Health/Occupational Health and Safety Administration/United States Coast Guard/Environmental Protection Agency, October 1985.
26. Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, February 19, 1992, OSWER Directive 9355.7-03.

27. Procedure for Planning and Implementing Off-Site Response Actions, Federal Register, Volume 50, Number 214, November 1985, pages 45933-45937.
28. Procedures for Completion and Deletion of NPL Sites, U.S. EPA, Office of Emergency and Remedial Response, April 1989, OSWER Directive No. 9320.2-3A.
29. Quality in the Constructed Project: A Guideline for Owners, Designers and Constructors, Volume 1, Preliminary Edition for Trial Use and Comment, American Society of Civil Engineers, May 1988.
30. Remedial Design and Remedial Action Handbook, U.S. EPA, Office of Emergency and Remedial Response, June 1995, OSWER Directive No. 9355.5-22.
31. Revision of Policy Regarding Superfund Project Assignments, OSWER Directive No. 9242.3-08, December 10, 1991. [Guidance, p. 2-2]
32. Scoping the Remedial Design (Fact Sheet), February 1995, OSWER Publ. 9355-5-21 FS.
33. Standard Operating Safety Guides, U.S. EPA, Office of Emergency and Remedial Response, November 1984.
34. Standards for the Construction Industry, Code of Federal Regulations, Title 29, Part 1926, Occupational Health and Safety Administration.
35. Standards for General Industry, Code of Federal Regulations, Title 29, Part 1910, Occupational Health and Safety Administration.
36. Structure and Components of 5-Year Reviews, OSWER Directive No. 9355.7-02, May 23, 1991. [Guidance, p. 3-5]
37. Superfund Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, April 1990, EPA/540/G-90/001.
38. Superfund Remedial Design and Remedial Action Guidance, U.S. EPA, Office of Emergency and Remedial Response, June 1986, OSWER Directive No. 9355.0-4A.
39. Superfund Response Action Contracts (Fact Sheet), May 1993, OSWER Publ. 9242.2-08FS.
40. TLVs-Threshold Limit Values and Biological Exposure Indices for 1987-88, American Conference of Governmental Industrial Hygienists.
41. Treatability Studies Under CERCLA, Final. U.S. EPA, Office of Solid Waste and Emergency Response, EPA/540/R-92/071a, October 1992.
42. USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, U.S. EPA, Office of Emergency and Remedial Response, July 1988.
43. USEPA Contract Laboratory Program Statement of Work for Organic Analysis, U.S. EPA, Office of Emergency and Remedial Response, February 1988.
44. User's Guide to the EPA Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.
45. Value Engineering (Fact Sheet), U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9355.5-03FS, May 1990.

See the following guidance documents for more information on performance-based contracting:

46. A Guide to Best Practices for Performance-Based Service Contracting, Office of Federal Procurement Policy, April 1996.
47. A Guide to Best Practices for Performance-Based Service Contracting, Final Edition, Office of Federal Procurement Policy, October 1998.
48. Performance-Based Contracting (Fact Sheet), U.S. EPA, Office of Emergency and Remedial Response, Draft February 1999.
49. Policy Letter 91-2, To The Heads of Executive Agencies and Departments, April 9, 1991.

Attachment 4 - Transmittal Of Documents For Acceptance By EPA

TRANSMITTAL OF DOCUMENTS FOR ACCEPTANCE BY EPA		DATE:	TRANSMITTAL NO.
TO:	FROM:		G New Transmittal G Re-submittal of Transmittal No. _____

SUBTASK NO.	DELIVERABLE	NO. OF COPIES	REMARKS

ACCEPTANCE ACTION	
DOCUMENTS FOUND ACCEPTABLE (LIST BY SUBTASK NO.)	NAME/TITLE/SIGNATURE OF REVIEWER DATE

Attachment 5 - Transmittal Register

TRANSMITTAL REGISTER								
PROJECT TITLE AND LOCATION				CONTRACT NO.			TASK ORDER NO.	
Subtask No.	DELIVERABLE	No of Copies	Due Date	Transmittal No	Date Received	Date Comments Sent to Contractor	EPA Acceptance Date	REMARKS